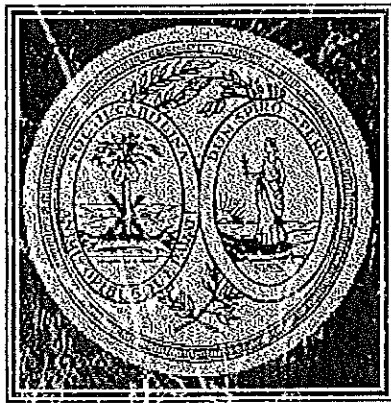


PUBLIC SERVICE  
COMMISSION



of  
SOUTH CAROLINA

COMMISSION  
STAFF  
REPORT

**Carolina Power & Light Company**

Docket No. 2003-1-E

Adjustment of Base Rates  
For Fuel Costs

January 2002 – December 2002 (Actual)  
(January, February and March 2003 Estimated)

**THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**

**STAFF REPORT**

**Of the**

**AUDIT DEPARTMENT**

**And**

**UTILITIES DEPARTMENT**

**DOCKET NO. 2003-1-E**

**CAROLINA POWER & LIGHT COMPANY**

**REPORT OF THE AUDIT DEPARTMENT**  
**THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**

**DOCKET NO. 2003-1-E**  
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**REPORT OF THE AUDIT DEPARTMENT**  
**THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**  
**DOCKET NO. 2003-1-E**  
**CAROLINA POWER & LIGHT COMPANY**

**ANALYSIS**

The Audit Department Staff has made an examination of the books and records of Carolina Power & Light Company (hereinafter referred to as "the Company") relative to the Commission's requirement under Docket No. 2003-1-E, that periodic hearings be conducted before the Commission concerning the Adjustment of Base Rates for Fuel Costs.

The current investigation of the Company's Retail Fuel Adjustment Clause covered the period January 2002 through March 2003. Since the current hearing is scheduled for March 2003, Staff's audit consisted of actual fuel costs for the period January 2002 through December 2002 and projected fuel costs for January, February and March 2003. Staff's computations of the Deferred Fuel Entries (Exhibit G) for the months of January, February and March were estimated for the purpose of adjusting base rates effective April 1, 2003. The January, February and March 2003 estimates will be trued-up in the Company's next hearing.

The Audit Department Staff's examination consisted of the following:

1. Analysis of Fuel Stock Account - Account # 151
2. Sample of Receipts to the Fuel Stock Account --Account #151
3. Verification of Charges to Nuclear Fuel Expense --- Account # 518

4. Verification of Purchased Power and Interchange (Net)
5. Verification of KWH Sales
6. Comparison of Coal Costs
7. Recomputation of Fuel Costs Adjustment Factor and Verification of Unbilled Revenue
8. Recomputation of True-up for (Over) Under-Recovered Fuel Costs
9. Analysis of Spot Coal Purchasing Procedures

#### **ANALYSIS OF FUEL STOCK ACCOUNT - ACCOUNT # 151**

Staff's analysis of the Fuel Stock Account consisted of tracing receipts to and issues from the fuel management system to the General Ledger, reviewing monthly journal entries originating in fuel accounting, and ensuring that only proper charges are entered in the Company's computation of fuel costs for purposes of adjusting base rates for fuel costs.

#### **SAMPLE OF RECEIPTS TO THE FUEL STOCK ACCOUNT-- ACCOUNT #151**

Staff's sample of receipts to the Fuel Stock Account consisted of randomly selecting transactions, tracing each of these transactions to a waybill and a purchase order for documentation purposes, and recalculating the transactions to insure mathematical correctness.

#### **VERIFICATION OF CHARGES TO NUCLEAR FUEL EXPENSE - ACCOUNT # 518**

Staff verified expense amounts to the Company's General Ledger. The expenses were also verified to the monthly fuel reports filed by the Company with this Commission.

#### **ANALYSIS OF PURCHASED POWER AND INTERCHANGE (NET)**

Staff performed an examination of the Company's purchased power and interchange (net)

amount used in the Fuel Adjustment Clause (FAC) for the period January 2002 through December 2002.

Staff obtained the detail of the purchases and sales made by Carolina Power and Light Company to and from other electric utilities. Staff verified the amounts that are being used in computing total fuel costs for each month. These details allowed the Staff to identify fuel costs that are being passed through the clause in computing the factor above or below the base for each period. See Staff's Exhibit F for details.

Furthermore, PSC Order No. 90-961, Docket No. 90-004-E, dated October 18, 1990, directed Staff to examine the Company's non-firm, off-system sales. Accordingly, Staff traced the sales and purchases transactions for January 2002 through December 2002 to the Company's sales and purchases monthly reports and invoices. Staff recomputed the sales and purchases.

In accordance with Public Service Commission Order No. 90-961, Docket No. 90-004-E, dated October 18, 1990, Staff will continue to review the Company's non-firm, off-system transactions during future audits.

#### **VERIFICATION OF KWH SALES**

The Audit Department Staff reconciled the KWH sales as reported to the Commission through monthly fuel adjustment filings.

#### **COMPARISON OF COAL COSTS**

Staff prepared exhibits from Carolina Power and Light Company's books and records reflecting coal costs during the review period. Specifically, these exhibits are as follows:

**Exhibit A - COAL COST STATISTICS**

**Exhibit B - RECEIVED COAL-COST PER TON (PER PLANT)**

## **Exhibit C - RECEIVED COAL-COST PER TON COMPARISON**

With reference to Exhibit A, Coal Cost Statistics, Staff has shown a detailed analysis of spot and contract coal for the twelve (12) months ended December 2002. Also, in Exhibit A, the Weighted Average of Coal Received is reflected for the twelve-month period. Total costs for the twelve-month period were divided by the total tons for the twelve-month period in arriving at the average.

In Exhibit B, Received Coal-Cost Per Ton (Per Plant), Staff reflects the overall cost per ton of coal by month per plant.

In Exhibit C, Received Coal-Cost Per Ton Comparison, Staff reflects the overall cost per ton of coal by month for the three major electric utilities regulated by this Commission.

## **RECOMPUTATION OF FUEL COSTS ADJUSTMENT FACTOR AND VERIFICATION OF UNBILLED REVENUES**

Staff recomputed the Fuel Costs Adjustment Factor for the months of January 2002 through December 2002.

## **RECOMPUTATION OF TRUE-UP FOR (OVER) UNDER-RECOVERED FUEL COSTS**

Staff analyzed the cumulative under-recovery of fuel costs that the Company had incurred for the period January 2002 through December 2002 totaling \$7,393,266. Staff added the projected under-recovery of \$1,492,363 for the month of January 2003, the projected over-recovery of \$1,056,961 for the month of February 2003, and the projected over-recovery of \$1,028,730 for the month of March 2003 to arrive at a cumulative under-recovery of \$6,799,938 as of March 2003. The Company's cumulative under-recovery, per its testimony in Docket No. 2003-1-E, as of December 2002 totals \$7,472,289 and as of March 2003, the cumulative under-



recovery totals \$6,878,961. Staff's Purchased Power figures for January 2002 through April 2002, June 2002, and October 2002 through December 2002 and the resultant (over)/under-recovery monthly amounts for February 2002, March 2002, April 2002 and October 2002 differ from the Company's figures. Staff's figures reflect calculation adjustments made to Purchased Power Costs for January 2002 through December 2002 (per Staff's report), after Staff reviewed the Company's Purchased Power invoices and reports. As a result, on a total system basis, the difference between the Company's and the Staff's Purchased Power Costs for the review period totals \$613,703. Also, as a result, on a S.C. jurisdictional basis, the difference between the Company's and the Staff's cumulative under-recovery balances as of actual December 2002 and as of estimated March 2003 is \$79,023.

As stated in Carolina Power & Light Company's S.C. Retail Adjustment for Fuel Costs Rider, fuel costs will be included in base rates to the extent determined reasonable and proper by the Commission.

Accordingly, the Commission should consider the under-recovery of \$6,799,938 along with the anticipated fuel costs for the period April 1, 2003 through March 31, 2004 for the purpose of determining the base cost of fuel in base rates effective April 1, 2003. The \$6,799,938 under-recovery figure was provided to the Commission's Utilities Department.

#### **ANALYSIS OF SPOT COAL PURCHASING PROCEDURES**

The Audit Staff examined the procedure followed by the Company's fossil fuel area, the Fossil Fuels Department, for obtaining and accepting bids on spot coal. The Fossil Fuels Department maintains a list of coal vendors (suppliers) from whom bids are solicited as needed. When bids are requested, the Fossil Fuels Department's spot coal purchasing personnel mails

each of these coal vendors a Coal Quotation Form and letter requesting bids. In order for a coal vendor's name to be on this mailing list, the coal vendor must have completed the Supplier Capability Report and must possess the necessary financial, technical, and business resources to supply coal consistent with the Company's requirements.

The Coal Quotation Forms provide such information as the name of the coal company (the supplier), the name of the producer, the name of the mine, the number of tons offered, coal specifications, price per ton, the month(s) the shipment will be made, mining methods of the producer and shipping transportation data. It should be noted that these solicitation letters and Coal Quotation Forms, based on whether a coal vendor has any spot coal to sell, are sent to the suppliers when there are near-term needs (one to twelve months) for coal.

If the Company decides to purchase spot coal in a given month, after reviewing their spot coal requirements, then all the bids received are evaluated. The Company normally requires all bids to be made on Coal Quotation Forms. For evaluation purposes, the spot coal quotations are evaluated in a coal quality impact model that examines cost impacts related to boiler efficiency, fuel handling and ash handling. Then an optimization model is run, which in addition to recommending the distribution of the coal to the plants, also statistically compiles the quotation data and is used by the Company to adhere to sulfur limitations imposed by State and Federal regulations, as well as to exclude any coal that may exceed other environmental and generating unit constraints.

The Company's coal procurement personnel consider at least three factors when they evaluate the spot coal bids: (a) cost of the delivered coal on a cents/mmmbtu basis, (b) the BTU, ash, moisture, volatiles, grindability, ash softening temperature, and sulfur content of the coal offered,

and (c) the past performance of the supplier and the coal obtained from the producer. The Company's coal procurement personnel determine the current market price for spot coal prior to negotiating with the coal vendors over their bids. In this way, the coal procurement personnel determine the limits they should stay within when bargaining for coal. The coal procurement personnel bargain over the price of the coal as well as other possible terms and conditions of a prospective purchase, and either accepts or rejects the coal vendor's offer or the Company may make a counter-offer to the vendor's offer.

Upon agreement on a spot coal purchase, the Fossil Fuels Department prepares a purchase letter, which documents the terms and conditions of the purchase. The coal vendor is faxed a copy of the purchase letter. The coal vendor takes samples of coal according to ASTM Standards. The samples are sent to an independent fuel laboratory which analyzes each spot coal shipment for BTU, ash, moisture and sulfur content, and periodically analyzes coal for volatiles, grindability, and ash softening temperature. The coal analysis results are entered into the computerized Fuel Management System, which is used by the Fossil Fuels Department to monitor coal receipts and to process coal payments. The appropriate premium or penalty on the coal purchased is determined by the Fossil Fuels Department through the Fuel Management System which adds a premium or assesses a penalty to the total amount due to the coal vendor, and the results are forwarded to the Company's Accounting Department. The Fossil Fuels Department closely monitors the quality of coal shipped by various producers. If a certain producer renders poor performance, the coal procurement personnel consider this when analyzing any future offers received from the supplier.

Occasionally, the Fossil Fuels Department receives unsolicited bids for the purchase of

coal. The same procedure is used when evaluating the offer, determining the need for spot coal, purchasing, sampling, and assessing penalties or premiums.

The Company's spot coal requirements are obtained through short-term commitments with terms that may range from one month to twelve months duration.

During December 2001, after a review of its inventory needs for the review period of January 2002 through December 2002, the Company was able to determine some of the spot coal tons required. At that time, the Company determined that approximately 120,000 tons of spot coal could be required. The actual amount of spot coal received for this period is reflected in Staff's Exhibit A.

### **EXHIBITS**

The Audit Department Staff's exhibits relative to this proceeding are identified as follows:

#### **EXHIBIT A: COAL COST STATISTICS (AND WEIGHTED AVERAGE OF COAL RECEIVED)**

In Exhibit A, Coal Cost Statistics, Staff compares spot and contract coal received for the period January 2002 through December 2002. The comparison is made in five (5) areas as follows:

- (1) Tons Received
- (2) Percentage of Total Tons Received
- (3) Received Cost Per Ton
- (4) Total Received Cost
- (5) Cost Per MBTU

This exhibit also reflects the total spot and contract tons received during the period January 2002 through December 2002. Staff has taken the total received cost for the twelve (12)

months and divided this by the total tons for the twelve (12) months in arriving at a Weighted Average Cost per ton for the twelve (12)-month period.

#### **EXHIBIT B: RECEIVED COAL-COST PER TON (PER PLANT)**

This exhibit reflects the received cost per ton by month for each of Carolina Power and Light Company's plants.

#### **EXHIBIT C: RECEIVED COAL-COST PER TON COMPARISON**

In Exhibit C, Received Coal-Cost Per Ton, Staff has made a comparison of received coal - cost per ton for Carolina Power & Light Company, Duke Power Company and South Carolina Electric & Gas Company. The costs per ton reflected for the coal purchases were extracted from fuel costs data from all three major electric utilities.

#### **EXHIBIT D: COAL FUEL STOCKS—NUMBER OF DAYS OF SUPPLY (ALL PLANTS)**

This exhibit reflects Carolina Power & Light Company's coal inventory in terms of tons received, consumed, and on hand at the end of the month. The number of days of supply is also shown.

#### **EXHIBIT E: TOTAL BURNED COST (FOSSIL AND NUCLEAR)**

This exhibit shows fuel costs burned by type during the period January 2002 through December 2002, including emission allowance costs.

#### **EXHIBIT F: COST OF FUEL**

In Exhibit F, Staff has computed the total fuel cost applicable to the factor computation. There are three (3) components used in arriving at this cost. These components are as follows:

- (1) Cost of Fuel Burned
- (2) Purchase and Interchange Power Cost

### (3) Authorized Adjustments

**Cost of Fuel Burned---** This amount is the burned cost of all fossil and nuclear fuel burned during the period. The costs associated with emission allowances are also reflected. A detail breakdown of coal, oil, gas, emission allowances and nuclear fuel can be seen in Exhibit E.

**Purchase and Interchange Power Fuel Cost---** This amount is the monthly kilowatt hours delivered to or received by one electric utility from another electric utility.

**Authorized Adjustments---** These are amounts decreasing the total fuel cost as authorized by regulatory agencies.

Total fuel cost applicable to the factor is computed by adding the cost of fuel burned to purchase and interchange power and authorized adjustments.

### **EXHIBIT G: S.C. FUEL COSTS COMPUTATION**

Shown in this exhibit are the actual costs for January 2002 through December 2002 and the estimated fuel costs for January, February and March 2003.

Based on the Audit Staff's examination of Carolina Power & Light Company's books and records, a comparison of fuel costs among utilities and the utilization of the fuel costs recovery mechanism as directed by this Commission, the Audit Staff is of the opinion that the Company has complied with the directives of the Commission.

**CAROLINA POWER AND LIGHT COMPANY**  
**COAL COST STATISTICS**  
**JANUARY 2002 - DECEMBER 2002**  
**SPOT**

<u>MONTH</u>	<u>TONS RECEIVED</u>	<u>PERCENTAGE</u>	<u>COST/TON RECEIVED</u>	<u>TOTAL RECEIVED COST</u>	<u>\$/MBTU</u>
	<u>TONS</u>	<u>%</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
Jan-02	189,579.07	16.53%	46.43	8,803,042.97	1.8608
Feb-02	194,835.62	18.33%	48.05	9,361,033.99	1.8819
Mar-02	139,575.39	11.87%	48.93	6,830,087.32	1.9594
Apr-02	44,870.81	8.40%	54.93	2,464,767.86	2.2384
May-02	99,919.10	11.81%	51.87	5,182,480.27	2.0738
Jun-02	115,220.13	18.70%	53.74	6,191,863.65	2.1489
Jul-02	53,153.26	6.98%	52.09	2,768,648.50	2.0783
Aug-02	63,155.08	5.38%	50.32	3,177,936.02	2.0108
Sep-02	64,975.10	5.81%	50.03	3,250,420.29	1.9921
Oct-02	49,199.54	5.51%	51.12	2,514,921.23	2.0292
Nov-02	51,947.02	5.46%	51.24	2,661,823.96	2.0838
Dec-02	33,375.25	3.65%	50.55	1,687,060.99	2.0682
Totals (1/02 - 12/02)	<u>1,099,805.37</u>			<u>54,894,087.05</u>	

**CONTRACT**

<u>MONTH</u>	<u>TONS RECEIVED</u>	<u>PERCENTAGE</u>	<u>COST/TON RECEIVED</u>	<u>TOTAL RECEIVED COST</u>	<u>\$/MBTU</u>
	<u>TONS</u>	<u>%</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
Jan-02	957,137.17	83.47%	43.71	41,838,853.74	1.7771
Feb-02	868,005.22	81.67%	45.72	39,685,841.44	1.8317
Mar-02	1,036,747.42	88.13%	44.51	46,143,364.48	1.8103
Apr-02	489,323.70	91.60%	49.04	23,994,787.05	1.9766
May-02	746,266.72	88.19%	48.74	36,374,468.95	1.9802
Jun-02	501,085.01	81.30%	47.18	23,642,896.33	1.8791
Jul-02	708,319.36	93.02%	49.33	34,941,394.31	1.9802
Aug-02	1,111,210.57	94.62%	49.54	55,046,003.69	1.9819
Sep-02	1,053,937.69	94.19%	47.28	49,833,625.82	1.9004
Oct-02	842,907.21	94.49%	51.12	43,091,458.32	2.0548
Nov-02	899,159.66	94.54%	48.71	43,799,242.68	1.9548
Dec-02	879,798.36	96.35%	48.67	42,816,081.26	1.9689
Totals (1/02 - 12/02)	<u>10,093,898.09</u>			<u>481,208,018.07</u>	

**COMBINED**

<u>MONTH</u>	<u>TONS RECEIVED</u>	<u>PERCENTAGE</u>	<u>COST/TON RECEIVED</u>	<u>TOTAL RECEIVED COST</u>	<u>\$/MBTU</u>
	<u>TONS</u>	<u>%</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
Jan-02	1,146,716.24	100.00%	44.16	50,641,896.71	1.7911
Feb-02	1,062,840.84	100.00%	46.15	49,046,875.43	1.8411
Mar-02	1,176,322.81	100.00%	45.03	52,973,451.80	1.8282
Apr-02	534,194.51	100.00%	49.53	26,459,554.91	1.9984
May-02	846,185.82	100.00%	49.11	41,556,949.22	1.9914
Jun-02	616,305.14	100.00%	48.41	29,834,759.98	1.9294
Jul-02	761,472.62	100.00%	49.52	37,710,042.81	1.9871
Aug-02	1,174,365.65	100.00%	49.58	58,223,939.71	1.9834
Sep-02	1,118,912.79	100.00%	47.44	53,084,046.11	1.9058
Oct-02	892,106.75	100.00%	51.12	45,606,379.55	2.0534
Nov-02	951,106.68	100.00%	48.85	46,461,066.64	1.9617
Dec-02	913,173.61 (1)	100.00%	48.73 (1)	44,503,142.25	1.9725
Totals (1/02 - 12/02)	<u>11,193,703.46</u>			<u>536,102,105.12</u>	

Total Received Cost = 536,102,105.12 = \$ 47.89

Total Tons Received 11,193,703.46

(1) Before Aerial Survey Inventory Adjustment

AUDIT EXHIBIT B

CAROLINA POWER & LIGHT COMPANY  
RECEIVED COAL-COST PER TON (PER PLANT)  
JANUARY 2002 - DECEMBER 2002

PLANT	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
CAPE FEAR	44.08	43.62	40.65	43.86	45.35	42.55	43.83	40.79	40.20	45.60	42.24	41.45
WEATHERSPOON	50.19	56.23	55.58	52.56	54.91	52.23	52.94	54.24	41.48	55.28	54.65	52.96
LEE	41.33	41.57	42.87	43.01	43.61	40.76	48.77	45.31	44.68	42.64	43.72	42.25 (1)
SUTTON	48.82	49.59	92.15	0.00	52.32	49.67	50.47	51.93	46.18	55.10	51.32	49.52
ROBINSON	46.05	50.49	54.35	54.40	43.63	50.82	52.23	51.28	47.71	55.18	50.47	52.33
ASHEVILLE	43.19	46.51	47.76	46.76	47.81	48.77	48.01	47.80	48.43	47.77	49.61	50.28
ROXBORO 1-3	44.26	46.14	44.99	51.13	51.06	47.42	50.09	51.00	47.34	55.62	48.62	48.16
ROXBORO 4	43.32	47.96	42.10	51.40	49.42	55.88	50.24	48.64	50.57	48.65	48.35	49.88 (1)
MAYO	42.29	43.45	44.99	50.12	48.78	53.85	50.71	50.69	50.59	50.28	50.86	50.80
TOTAL	44.16	46.15	45.03	49.53	49.11	48.41	49.52	49.58	47.44	51.12	48.85	48.73 (1)

(1) Before Aerial Survey Inventory Adjustment



**CAROLINA POWER & LIGHT COMPANY  
RECEIVED COAL-COST PER TON COMPARISON  
JANUARY 2002 - DECEMBER 2002**

<u>CAROLINA POWER &amp; LIGHT COMPANY</u>				
<u>FREIGHT</u>				
<u>MONTH</u>	<u>INVOICE COST</u>	<u>COST PER</u>	<u>TOTAL COST</u>	<u>COST PER</u>
	<u>PER TON</u>	<u>TON</u>	<u>PER TON</u>	<u>MBTU</u>
	\$	\$	\$	\$
Jan-02	32.83	11.33	44.16	1.7911
Feb-02	34.77	11.38	46.15	1.8411
Mar-02	33.58	11.45	45.03	1.8282
Apr-02	33.97	15.56	49.53	1.9984
May-02	33.50	15.61	49.11	1.9914
Jun-02	33.21	15.20	48.41	1.9294
Jul-02	34.35	15.17	49.52	1.9871
Aug-02	34.00	15.58	49.58	1.9834
Sep-02	31.73	15.71	47.44	1.9058
Oct-02	35.66	15.46	51.12	2.0534
Nov-02	33.11	15.74	48.85	1.9617
Dec-02	33.11	15.62	48.73	1.9725

<u>DUKE POWER COMPANY</u>				
<u>FREIGHT</u>				
<u>MONTH</u>	<u>INVOICE COST</u>	<u>COST PER</u>	<u>TOTAL COST</u>	<u>COST PER</u>
	<u>PER TON</u>	<u>TON</u>	<u>PER TON</u>	<u>MBTU</u>
	\$	\$	\$	\$
Jan-02	27.03	14.56	41.59	1.7014
Feb-02	26.27	15.57	41.84	1.6918
Mar-02	24.99	14.50	39.49	1.6040
Apr-02	26.95	15.08	42.03	1.7119
May-02	26.01	15.16	41.17	1.6856
Jun-02	26.35	15.18	41.53	1.6837
Jul-02	25.78	15.53	41.31	1.6784
Aug-02	26.18	15.44	41.62	1.6653
Sep-02	25.23	15.24	40.47	1.6349
Oct-02	26.00	15.76	41.76	1.6915
Nov-02	23.87	15.24	39.11	1.5977
Dec-02	24.31	15.24	39.55	1.6169

<u>SOUTH CAROLINA ELECTRIC &amp; GAS COMPANY</u>				
<u>FREIGHT</u>				
<u>MONTH</u>	<u>INVOICE COST</u>	<u>COST PER</u>	<u>TOTAL COST</u>	<u>COST PER</u>
	<u>PER TON</u>	<u>TON</u>	<u>PER TON</u>	<u>MBTU</u>
	\$	\$	\$	\$
Jan-02	30.08	12.43	42.51	1.6851
Feb-02	30.24	12.35	42.59	1.6652
Mar-02	29.89	12.00	41.89	1.6391
Apr-02	30.24	12.00	42.24	1.6563
May-02	29.76	12.38	42.14	1.6560
Jun-02	29.90	12.26	42.16	1.6526
Jul-02	30.28	12.38	42.66	1.6715
Aug-02	30.63	12.12	42.75	1.6727
Sep-02	31.25	11.89	43.14	1.6933
Oct-02	30.74	13.04	43.78	1.7186
Nov-02	31.03	11.75	42.78	1.6750
Dec-02	31.35	11.78	43.13	1.6922

AUDIT EXHIBIT D

CAROLINA POWER & LIGHT COMPANY  
COAL FUEL STOCKS - NUMBER OF DAYS OF SUPPLY (ALL PLANTS)  
JANUARY 2002 - DECEMBER 2002

<u>MONTH</u>	<u>TONS BEGINNING OF MONTH</u>	<u>TONS RECEIVED DURING MONTH</u>	<u>TONS CONSUMED DURING MONTH</u>	<u>BALANCE END OF MONTH</u>	<u>NUMBER OF DAYS OF SUPPLY</u>
	TONS	TONS	TONS	TONS	DAYS
Jan-02	2,280,372	1,146,716	991,860	2,435,228	60
Feb-02	2,435,228	1,062,841	848,621	2,649,448	65
Mar-02	2,649,448	1,176,323	974,838	2,850,933	70
Apr-02	2,850,933	534,194	789,015	2,596,112	64
May-02	2,596,112	846,186	752,676	2,689,622	67
Jun-02	2,689,622	616,305	1,011,801	2,294,126	57
Jul-02	2,294,126	761,473	1,216,508	1,839,091	45
Aug-02	1,839,091	1,174,365	1,117,523	1,895,933	47
Sep-02	1,895,933	1,118,913	1,021,428	1,993,418	49
Oct-02	1,993,418	892,107	918,074	1,967,451	49
Nov-02	1,967,451	951,107	923,409	1,995,149	49
Dec-02	1,995,149	872,879 (1)	1,022,485	1,845,543	45

(1) Includes an aerial survey inventory adjustment - reduction of 40,295 tons

AUDIT EXHIBIT E

CAROLINA POWER & LIGHT COMPANY  
TOTAL BURNED COST (FOSSIL AND NUCLEAR) \*  
JANUARY 2002 - DECEMBER 2002

<u>MONTH</u>	<u>COAL</u>	<u>OIL</u>	<u>GAS</u>	<u>EMISSION</u> <u>ALLOWANCES</u>	<u>NUCLEAR</u>	<u>TOTAL</u> <u>BURNED</u> <u>COST</u>
	\$	\$	\$	\$	\$	\$
Jan-02	44,078,720	3,497,728	1,960,231	842,593	9,275,234	59,654,506
Feb-02	37,976,639	1,210,139	1,292,450	709,969	8,609,145	49,798,342
Mar-02	44,235,987	2,286,804	(2,775,446)	805,644	7,424,415	51,977,404
Apr-02	35,869,663	1,255,396	3,643,945	620,404	8,544,852	49,934,260
May-02	34,842,352	1,555,830	5,981,641	661,314	9,852,308	52,893,445
Jun-02	47,697,803	1,510,857	9,572,464	862,289	9,363,705	69,007,118
Jul-02	57,542,201	1,348,564	18,934,351	1,018,633	9,197,972	88,041,721
Aug-02	53,645,151	968,194	33,416,876	864,825	9,565,517	98,460,563
Sep-02	49,861,996	317,115	10,806,902	938,982	8,754,494	70,679,489
Oct-02	44,331,177	616,423	6,354,991	735,295	8,308,627	60,346,513
Nov-02	45,520,639	587,918	2,773,537	628,476	8,564,502	58,075,072
Dec-02	50,304,297	709,511	2,718,615	829,872	9,883,646	64,445,941
<b>TOTALS</b>	<b>545,906,625</b>	<b>15,864,479</b>	<b>94,680,557</b>	<b>9,518,296</b>	<b>107,344,417</b>	<b>773,314,374</b>

\* Includes Emission Allowances

AUDIT EXHIBIT F

CAROLINA POWER & LIGHT COMPANY  
COST OF FUEL  
JANUARY 2002 - DECEMBER 2002

<u>MONTH</u>	<u>COST OF FUEL</u> <u>BURNED</u> \$	<u>PURCHASE AND</u> <u>INTERCHANGE</u> <u>POWER FUEL</u> <u>COSTS</u> \$	<u>FUEL COST</u> <u>RECOVERED</u> <u>INTERSYSTEM</u> <u>SALES</u> \$	<u>TOTAL NET FUEL</u> <u>COST</u> \$
Jan-02	59,654,506	7,563,242	(9,734,202)	57,483,546
Feb-02	49,798,342	7,520,410	(10,050,744)	47,268,008
Mar-02	51,977,404	7,115,894	(10,641,442)	48,451,856
Apr-02	49,934,260	8,792,008	(9,672,368)	49,053,900
May-02	52,893,445	11,183,747	(12,191,985)	51,885,207
Jun-02	69,007,118	15,733,038	(18,144,788)	66,595,368
Jul-02	88,041,721	18,655,591	(23,291,233)	83,406,079
Aug-02	98,460,563	18,591,994	(17,293,528)	99,759,029
Sep-02	70,679,489	8,737,774	(15,532,508)	63,884,755
Oct-02	60,346,513	7,269,838	(9,358,008)	58,258,343
Nov-02	58,075,072	5,351,454	(10,800,040)	52,626,486
Dec-02	64,445,941	7,540,347	(14,575,621)	57,410,667
Total	773,314,374	124,055,337	(161,286,467)	736,083,244

CAROLINA POWER & LIGHT COMPANY  
S.C. FUEL COSTS COMPUTATION  
JANUARY 2002 - MARCH 2003

	ACTUAL					
	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
Fossil Fuel	50,379,272	41,189,197	44,552,989	41,389,408	43,041,137	59,643,413
Nuclear Fuel	9,275,234	8,609,145	7,424,415	8,544,852	9,852,308	9,363,705
Purchased Power (2)	7,563,242	7,520,410	7,115,894	8,792,008	11,183,747	15,733,038
Sub-total	67,217,748	57,318,752	59,093,298	58,726,268	64,077,192	84,740,156
Less: Intersystem Sales	9,734,202	10,050,744	10,641,442	9,672,368	12,191,985	18,144,788
Net Fuel Costs	57,483,546	47,268,008	48,451,856	49,053,900	51,885,207	66,595,368
Total System KWH Sales	4,326,356,875	3,986,640,589	3,660,252,039	3,650,567,222	3,940,845,315	4,230,780,341
\$/KWH	0.01329	0.01186	0.01324	0.01344	0.01317	0.01574
Less: Base	0.01517	0.01517	0.01517	0.01471	0.01471	0.01471
Fuel Adjustment/KWH	(0.00188)	(0.00331)	(0.00193)	(0.00127)	(0.00154)	0.00103
S.C. KWH Sales	590,653,624	566,788,497	517,394,487	537,582,771	565,213,915	601,913,113
Deferred Fuel Entry	(1,110,429)	(1,876,070)	(998,571)	(1,649,308) (3)	(870,429)	619,971
December 2001 (1)	9,906,921					
Cumulative (Over)/Under						
Recovery	8,796,492	6,920,422	5,921,851	4,272,543	3,402,114	4,022,085

Note:

(1) Staff's cumulative under-recovery balance brought forward from December 2001 of \$ 9,906,921 differs from the Company's beginning cumulative under-recovery balance from December 2001 by \$ 435,145. This beginning cumulative difference is based on Staff's corrections from the last fuel review period. It should be noted that the Company, in its testimony, includes an applicable adjustment of \$435,145 (which is part of a total adjustment of \$ 1,401,723) to April 2002's monthly deferred entry. The other portion of the \$ 1,401,723 April 2002 Company adjustment, which amounts to \$ 966,578, is mentioned in Staff's Note (3).

(2) Staff's Purchased Power figures for January 2002 through April 2002, June 2002, and October 2002 through December 2002 and the resultant (over)/under recovery monthly amounts for February 2002, March 2002, April 2002 and October 2002 differ from the Company's figures. Staff's figures reflect calculation adjustments made to Purchased Power Costs for January 2002 through December 2002, per Staff's report. As a result, on a total system basis, the difference between the Company's and the Staff's Purchased Power Costs for the review period totals \$ 613,703. Also, as a result, on a S.C. jurisdictional basis, the difference between the Company's and the Staff's cumulative under-recovery balances as of actual December 2002 and as of estimated March 2003 is \$ 79,023.

CAROLINA POWER & LIGHT COMPANY  
S.C. FUEL COSTS COMPUTATION  
JANUARY 2002 - MARCH 2003

	ACTUAL						ESTIMATED		
	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	January 2003	February 2003	March 2003
Fossil Fuel	78,843,749	88,895,046	61,924,995	52,037,886	49,510,570	54,562,295			
Nuclear Fuel	9,197,972	9,565,517	8,754,494	8,308,627	8,564,502	9,883,646			
Purchased Power (2)	18,655,591	18,591,994	8,737,774	7,269,838	5,351,454	7,540,347			
Subtotal	106,697,312	117,052,557	79,417,263	67,616,351	63,426,526	71,986,288			
Less: Intersystem Sales	23,291,233	17,293,528	15,532,508	9,358,008	10,800,040	14,575,621			
Net Fuel Costs	83,406,079	99,759,029	63,884,755	58,258,343	52,626,486	57,410,667	78,119,811	54,981,400	52,919,700
Total System KWH Sales	4,931,109,092	5,027,552,913	4,583,938,052	4,065,246,677	3,683,742,188	4,305,682,171	4,565,182,136	4,237,864,000	4,102,688,000
\$/KWH	0.01691	0.01984	0.01394	0.01433	0.01429	0.01333	0.01711	0.01297	0.01290
Less: Base	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471
Fuel Adjustment/KWH	0.00220	0.00513	(0.00077)	(0.00038)	(0.00042)	(0.00138)	0.00240	(0.00174)	(0.00181)
S.C. KWH Sales	677,979,377	702,842,066	635,338,086	593,470,013	504,741,544	579,154,724	621,817,875	607,449,000	568,359,000
Deferred Fuel Entry	1,491,555	3,605,580	(489,210)	(225,519)	(211,991)	(799,234)	1,492,363	(1,056,961)	(1,028,730)
June 2002 - (p. 1 of 2)	4,022,085								
Cumulative (Over)/Under Recovery	5,513,640	9,119,220	8,630,010	8,404,491	8,192,500	7,393,266	8,885,629	7,828,668	6,799,938

Note:

(3) The over-recovery total of \$ 1,649,308 for April 2002 (on page 1 of 2) consists of April's monthly over-recovery amount of \$ 682,730 and a Company adjustment for April 2002 of \$ 966,578. The adjustment of \$ 966,578 was based on an agreement, concerning Purchased Power, between the Company and the Consumer Advocate after the Company's last fuel clause review proceeding.

(Explanation for Note (2) is on Page 1 of 2.)

**REPORT OF THE UTILITIES DEPARTMENT  
OF  
THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**

**DOCKET NO. 2003-1-E**

**CAROLINA POWER & LIGHT COMPANY**

**REPORT OF UTILITIES DEPARTMENT**  
**SOUTH CAROLINA PUBLIC SERVICE COMMISSION**  
**DOCKET NO. 2003-1-E**  
**CAROLINA POWER & LIGHT COMPANY**

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# **REPORT OF UTILITIES DEPARTMENT**

## **SOUTH CAROLINA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 2003-1-E**

### **CAROLINA POWER & LIGHT COMPANY REPORT OF FUEL ADJUSTMENT ANALYSIS**

#### **Scope of Examination**

The Commission's Utilities Department Staff analyzed the Company's procedures and practices pertaining to its fuel operation. Staff's examination consisted of the following:

- 1) Review of the Company's monthly fuel reports including:
  - a) Power Plant Performance Data Reports
  - b) Major Unit Outage Reports
  - c) Generation Mix
  - d) Generation Statistics
  - e) Retail Comparison of MWH Sales
  - f) Retail Comparison of Fuel Costs
- 2) Review of the Company's currently approved Adjustment for Fuel Costs Rider.
- 3) History of Cumulative Recovery Account.
- 4) Calculation of fuel costs to be included in the base rates for April 2003 through March 2004.

#### **REVIEW OF COMPANY'S MONTHLY FUEL REPORTS**

The Company files with this Commission monthly reports that include power plant performance data, major unit outages, generation mix, and other reports that provide the Staff pertinent data on which to evaluate the Company's fuel operating expenses.

Selected information from the Power Plant Performance Data Reports for nuclear and fossil plants is shown on Exhibit No. 1. It includes a listing of capacity factors and equivalent availability factors by major unit by month for the period, and also includes the yearly capacity factors (2000-2002) and the lifetime (cumulative) capacity factors for the nuclear units. These factors are expressed as a percentage. This percentage figure can be a useful index

when attempting to locate or identify a particular problem or unusual occurrence.

Pursuant to S.C. Code Ann. Section 58-27-865 (Supp. 2002) certain criteria are established for review of a utility's effort to minimize fuel expenses. In evaluating a utility's fuel costs under this section, it is necessary to examine and determine whether the utility has made every reasonable effort to minimize fuel costs associated with the operation of its nuclear generation system while "giving due regard to reliability of service, economical generation mix, generating experience of comparable facilities and minimization of the total cost of providing service."

The Nuclear Unit Outage Report considers each off-line outage experienced by unit, giving the inclusive dates of the outage, hours down, type of outage (Scheduled or Forced), the reason for the outage, and the corrective action taken. This information covers the period being considered in this proceeding and is shown in Exhibit No. 2A. Staff compiled this data through review of Company documents, NRC documents, and interviews with Company personnel. The Company's Nuclear Units performed very well during the period January 2002 through December 2002, accumulating an overall actual 96.7% capacity factor.

The Fossil Unit Outage Report is a listing of plants by unit, duration of outage (greater than 100 hours), reason for down time, and corrective action taken to return the unit to service. The information specifically reviewed for this proceeding is for the months of January 2002 through December 2002 and is included in Exhibit No. 2B. These Units' Availability Factors were in the 95 plus percentile for the greater portion of this period. The Company's base load fossil units achieved an equivalent availability of 91.3% for the period.

Staff reviewed and compiled a percentage Generation Mix statistic sheet for the Company's fossil, nuclear and hydraulic plants for January 2002 through December 2002. The fossil generation ranged from a high of 63% to a low 48%. The nuclear generation ranged from a high of 51% to a low of 37%. The percentage of generation by hydro ranged from a high of 2% to a low of 0%. This information is included in Exhibit No. 3. The Staff also collected and reviewed certain Generation Statistics of Major Plants for the 12 months ending December 31, 2002. This data is presented in Exhibit No. 4. This Exhibit shows the Company's major plants by name, type of fuel used, fuel cost in cents per kilowatt-hour to operate and total megawatt-hours generated for the period. The nuclear fueled Harris and Robinson Plants were lowest in cost at 0.44 cents per kilowatt-hour. The highest amount of generation of 13,782,631 megawatt-hours was produced at the Roxboro Station.

Utilities Department Exhibit No. 5 shows a comparison of the Company's original South Carolina retail megawatt-hour (MWH) estimated sales to the actual sales for the period from January 2002 through December 2002. The original projections ranged from an under-estimate of 13.84% in October

2002 to an over-estimate of 15.40% in September 2002 with a total over-estimate of 1.15% for the period.

Utilities Department Exhibit No. 6 shows a comparison of the Company's original fuel cost projections to the costs actually experienced for the months of January 2002 through December 2002. The original projections ranged from an over-estimate of 10.42% for February 2002 to an under-estimate of 22.63% for August 2002. The difference between actual and original projection of these fuel costs is further delineated graphically on Utilities Department Exhibit No. 7.

#### **REVIEW OF THE COMPANY'S CURRENTLY APPROVED RETAIL ADJUSTMENT FOR FUEL COSTS**

Staff has reviewed the Company's currently approved Retail Adjustment for Fuel Costs Rider and found it to continue to operate properly and therefore Staff does not recommend any modifications at this time. Exhibit No. 8 is a copy of the Company's currently approved Adjustment for Fuel Costs Rider.

#### **HISTORY OF THE CUMULATIVE RECOVERY ACCOUNT**

Exhibit No. 9 is a history of the cumulative recovery account balances from inception in 1979 to December 2002.

#### **CALCULATION OF BASE RATE FUEL COST COMPONENT FOR APRIL 2003 THROUGH MARCH 2004.**

Utilizing the currently projected sales and fuel cost figures for the period April 2003 through March 2004 and including the projected under-recovery balance of \$7,393,266 in the cumulative recovery account through December 2002 (See Audit Exhibit G), the average fuel expense is estimated to be 1.496 cents per kilowatt-hour. Applying this fuel factor to the period would create an ending period estimated \$21,065 over-collection in the cumulative recovery account.

The Commission has consistently expressed its expectation that the Company exercise all reasonable prudence and efficiency in its fuel purchasing practices and aggressively control the operation and maintenance of its production facilities to assure the lowest fuel costs possible. Also, the Commission has directed the Staff to monitor the Company's plant operations and fuel purchasing to insure that any inefficient or negligent practice is brought to the Commission's attention.

Exhibit No. 10 is a table of Projections of the Cumulative Recovery Account for various fuel base levels for the twelve month period ending March 2004. Also indicated in the table are the projected results using the current fuel factor base component of 1.471 cents/kWh which is also the Company's proposed factor in this proceeding.

**CAROLINA POWER & LIGHT COMPANY**  
**POWER PLANT PERFORMANCE DATA (%) REPORT**

CAPACITY FACTOR	MW RATING	LIFE TIME	YEAR 2000	YEAR 2001	YEAR 2002	JAN 2002	FEB 2002	MAR 2002	APR 2002	MAY 2002	JUN 2002	JUL 2002	AUG 2002	SEP 2002	OCT 2002	NOV 2002	DEC 2002
BRUNSWICK 1	820	65.0	93.7	101.7	93.2	101.9	96.9	2.7	93.8	100.7	101.2	107.8	108.3	74.9	107.4	110.2	109.0
BRUNSWICK 2	811	62.6	99.0	92.1	99.6	101.5	101.4	102.6	78.3	101.8	100.3	101.1	100.3	101.2	101.9	102.0	102.8
HARRIS1	900	83.2	91.1	71.3	99.3	89.1	100.2	103.4	102.8	102.4	101.3	87.8	94.6	101.4	102.6	103.5	104.1
ROBINSON 2	683	72.5	104.0	92.2	93.7	103.3	106.6	103.5	104.5	101.3	101.9	101.5	101.1	102.8	34.3	55.0	108.6
TOTAL NUCLEAR	3174	69.7	96.5	88.9	96.7	98.5	101.0	77.5	94.6	101.6	103.9	99.3	101.0	94.8	89.0	94.4	106.0

AVAILABILITY FACTOR	MW RATING	YEAR 2002	JAN 2002	FEB 2002	MAR 2002	APR 2002	MAY 2002	JUN 2002	JUL 2002	AUG 2002	SEP 2002	OCT 2002	NOV 2002	DEC 2002
MAYO 1	745	96.9	99.7	98.5	99.5	72.7	99.8	100.0	99.9	99.7	99.4	96.1	99.3	97.5
ROXBORO 2	670	89.7	100.0	100.0	89.8	94.8	91.0	81.6	94.5	64.9	94.2	92.8	92.3	81.8
ROXBORO 3	707	86.3	98.1	99.1	87.2	77.3	100.0	100.0	100.0	99.9	92.7	0.0	87.1	96.6
ROXBORO 4	700	92.0	100.0	98.9	97.9	86.7	32.5	100.0	99.9	100.0	100.0	100.0	88.8	99.7
BRUNSWICK 1	820	88.3	100.0	99.8	3.8	92.4	99.5	102.6	99.7	100.0	69.5	98.6	100.0	99.0
BRUNSWICK 2	811	97.6	98.7	98.6	100.0	77.0	99.4	98.7	100.0	99.2	99.7	100.0	99.3	99.7
HARRIS 1	900	97.0	86.9	96.6	100.0	100.0	100.0	100.0	87.4	93.8	100.0	100.0	99.9	100.0
ROBINSON 2	683	90.2	97.0	100.0	97.3	99.6	97.1	100.0	99.5	99.1	100.0	35.6	55.7	100.0

DOCKET NO. 2003-1-E  
UTILITIES DEPARTMENT  
EXHIBIT NO. 1

CAROLINA POWER & LIGHT COMPANY  
NUCLEAR UNIT OUTAGE REPORT  
January 1, 2002 – December 31, 2002

<u>NO.</u>	<u>DATE OFF</u>	<u>DATE ON</u>	<u>HOURS/TYPE*</u>	<u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u>
<u>BRUNSWICK UNIT 1</u>				
1.	03/01/02	03/30/02	696.85/S	Routine refueling and maintenance outage.
2.	09/21/02	09/29/02	186.13/S	Unit removed from service to replace leaking fuel bundles.
3.	09/30/02	10/01/02	2.43/F	Unit forced off line during power ascension from prior outage to repair a steam leak.
<u>BRUNSWICK UNIT 2</u>				
1.	04/19/02	04/26/02	150.50/S	Failed fuel bundle replaced and other inspections and maintenance performed.
<u>HARRIS UNIT 1</u>				
1.	09/22/01	01/03/02	2456.77/S	Continued Refueling, Steam Generator replacement and maintenance outage.
2.	07/13/02	07/14/02	33.75/S	Replaced failed control system circuit board and other maintenance.
3.	08/15/02	08/16/02	25.78/F	Unit tripped due to momentary grid undervoltage condition.
<u>ROBINSON UNIT 2</u>				
1.	10/12/02	11/13/02	767.65/S	Routine refueling and maintenance outage.
2.	11/24/02	11/24/02	7.25/F	Repair steam leak from cover plate of high-pressure turbine.

TYPE\* F- Forced S- Scheduled

CAROLINA POWER & LIGHT COMPANY  
 BASE LOAD FOSSIL UNIT OUTAGE REPORT  
 (100 HRS OR GREATER DURATION)  
 January 1, 2002 – December 31, 2002

<u>MONTH</u>	<u>UNIT</u>	<u>HRS/TYPE*</u>	<u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u>
JAN	None		
FEB	None		
MAR	Roxboro 3	48.62/S	Unit removed from service on March 29, for boiler overhaul and inspection, other corrective maintenance which continued through month's end.
APR	Mayo 1 Roxboro 3 Roxboro 4	188.43/S 89.87/S 95.38/S	Annual boiler inspection and maintenance. Continued- See March. Unit returned to service on April 4. Unit removed from service for boiler overhaul and inspection, as well as other maintenance, inspections and testing and continued into May.
MAY	Roxboro 4	484.75/S	Continued- See March. Unit returned to service on May 21.
JUN	Roxboro 2	104.42/S	Unit shut down to repair/replace leaking tubes in the water wall section of boiler.
JUL	None		
AUG	Roxboro 2	155.79/F	Unit forced off line to repair a leak in the main steam line piping.
SEP	Roxboro 3	47.58/S	Unit was removed from service to install new pollution control equipment and perform other inspections and maintenance which continued into November.
OCT	Roxboro 3	745.00/S	Outage continued from September.
NOV	Roxboro 3	67.63/S	Outage continued from October.
DEC	None		

TYPE\* F – Forced S - Scheduled

**CAROLINA POWER & LIGHT COMPANY**

**GENERATION MIX**

**JANUARY 1, 2002 - DECEMBER 31, 2002**

2002 MONTH	FOSSIL %	NUCLEAR %	HYDRO %
JANUARY	55	44	1
FEBRUARY	53	46	1
MARCH	60	39	1
APRIL	51	48	1
MAY	48	51	1
JUNE	57	42	1
JULY	63	37	0
AUGUST	61	39	0
SEPTEMBER	59	41	0
OCTOBER	56	43	1
NOVEMBER	54	44	2
DECEMBER	53	45	2

## CAROLINA POWER & LIGHT COMPANY

### GENERATION STATISTICS OF MAJOR PLANTS

JANUARY 1, 2002 - DECEMBER 31, 2002

PLANT	TYPE FUEL	AVERAGE FUEL COST (CENTS/KWH*)	GENERATION (MWH)
Harris	Nuclear	0.44	6,568,111
Robinson 2	Nuclear	0.44	5,606,109
Brunswick 1	Nuclear	0.46	5,469,718
Brunswick 2	Nuclear	0.50	5,781,107
Robinson 1	Coal	1.95	1,021,063
Weatherspoon	Coal	2.39	785,540
Asheville	Coal	1.79	2,442,627
Roxboro	Coal	1.87	13,782,631
Sutton	Coal	2.22	2,641,691
Cape Fear	Coal	1.75	1,857,462
Mayo	Coal	1.96	3,987,867
Lee	Coal	1.92	1,969,267

(\*) The average fuel costs for coal-fired plants include oil cost for start-up and flame stabilization.



**CAROLINA POWER & LIGHT COMPANY**  
**SOUTH CAROLINA RETAIL COMPARISON OF ESTIMATED TO ACTUAL ENERGY SALES FOR 2002**

	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>TOTAL</u>
[1] ESTIMATED SALES [MWH]	665,027	585,980	549,271	546,506	537,117	557,984	674,362	645,454	733,183	511,337	539,738	608,463	7,154,422
[2] ACTUAL SALES [MWH]	590,654	566,788	517,394	537,583	565,214	601,913	677,979	702,842	635,338	593,470	504,742	579,155	7,073,072
[3] AMOUNT DIFFERENCE [1]-[2]	74,373	19,192	31,877	8,923	-28,097	-43,929	-3,617	-57,388	97,845	-82,133	34,996	29,308	81,350
[4] PERCENT DIFFERENCE [3]/[2]	12.59%	3.39%	6.16%	1.66%	-4.97%	-7.30%	-0.53%	-8.17%	15.40%	-13.84%	6.93%	5.08%	1.15%

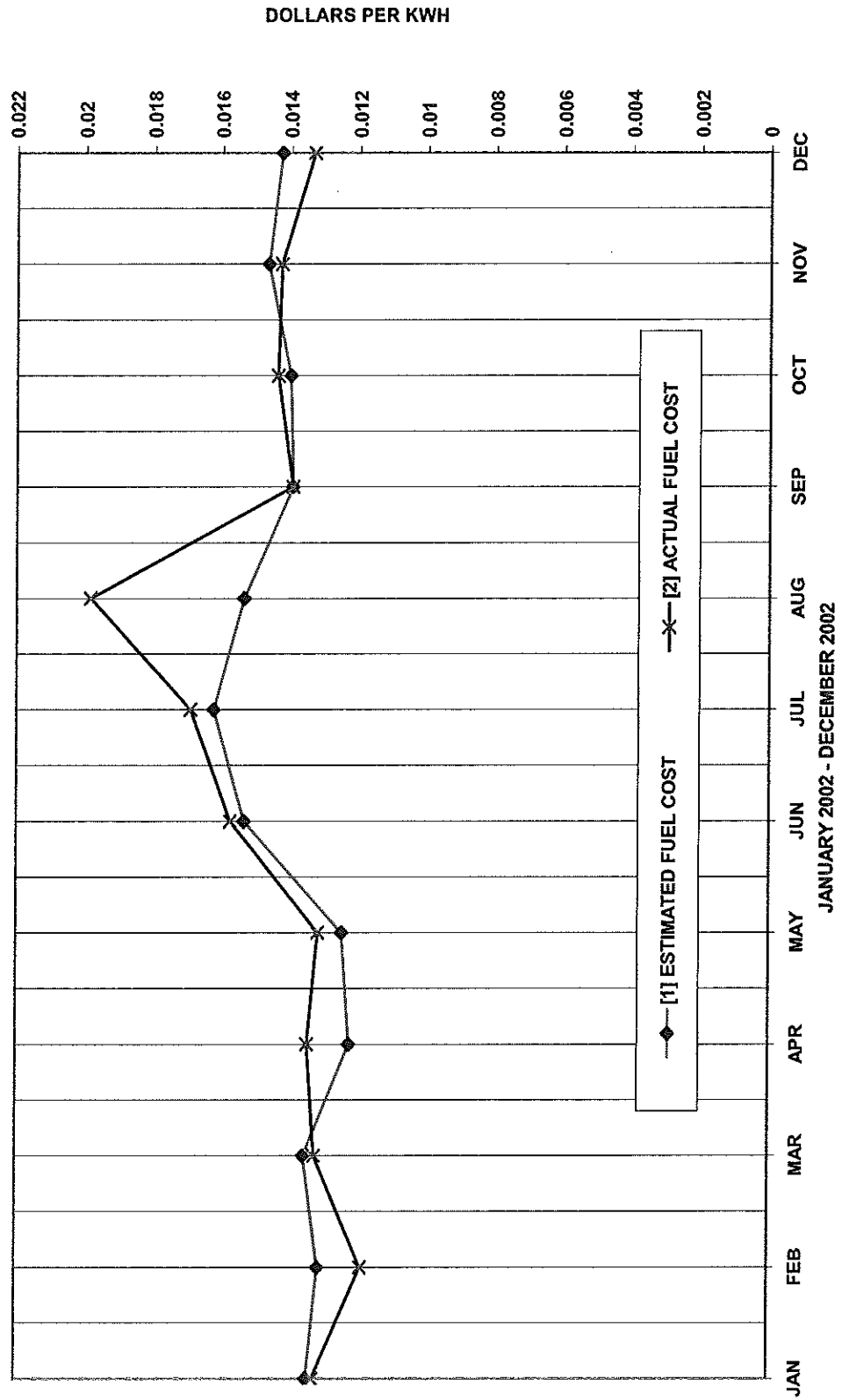
DOCKET NO. 2003-1-E  
UTILITIES DEPARTMENT  
EXHIBIT NO. 5

**CAROLINA POWER & LIGHT COMPANY**  
**SOUTH CAROLINA RETAIL COMPARISON OF ESTIMATED TO ACTUAL FUEL COST FOR 2002**

	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
[1] ESTIMATED FUEL COST PROJECTION	0.01347	0.01314	0.01357	0.01225	0.01247	0.01534	0.01624	0.01535	0.01394	0.01401	0.01467	0.01428
[2] ACTUAL FUEL COST EXPERIENCE	0.01329	0.01190	0.01325	0.01348	0.01317	0.01574	0.01691	0.01984	0.01394	0.01438	0.01429	0.01333
[3] AMOUNT IN BASE	0.01517	0.01517	0.01517	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471
[4] VARIANCE FROM ACTUAL [1-2]/[2]	1.35%	10.42%	2.42%	-9.12%	-5.32%	-2.54%	-3.96%	-22.63%	0.00%	-2.57%	2.66%	7.13%

DOCKET NO. 2003-1-E  
UTILITIES DEPARTMENT  
EXHIBIT NO. 6

CAROLINA POWER & LIGHT COMPANY  
ESTIMATED TO ACTUAL FUEL COST



Carolina Power & Light Company  
(South Carolina Only)

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RIDER NO. 39U  
ADJUSTMENT FOR FUEL COSTS

APPLICABILITY

This adjustment is applicable to and is a part of the Utility's South Carolina retail electric rate schedules.

The Public Service Commission has determined that the costs of fuel in an amount to the nearest one-thousandth of a cent, as determined by the following formula, will be included in the base rates to the extent determined reasonable and proper by the Commission:

$$F = \frac{E}{S} + \frac{G}{S_1}$$

Where:

F = Fuel cost per kilowatt-hour included in base rate, rounded to the nearest one-thousandth of a cent.

E = Total projected system fuel costs:

- (A) Fuel consumed in the Utility's own plants and the Utility's share of fuel consumed in jointly owned or leased plants. The cost of fossil fuel shall include no items other than those listed in Account 151 of the Commission's Uniform System of Accounts for Public Utilities and Licensees and the cost of SO<sub>2</sub> emission allowances recorded in FERC Account 509 (allowance cost). The cost of nuclear fuel shall be that as shown in Account 518 excluding rental payments on leased nuclear fuel and except that, if Account 518 also contains any expense for fossil fuel which has already been included in the cost of fossil fuel, it shall be deducted from this account.

Plus

- (B) Purchased power fuel costs and allowance costs such as those incurred in unit power and Limited Term power purchases where the fuel costs and applicable allowance cost associated with energy purchased are identifiable and are identified in the billing statement.

Plus

- (C) Interchange power fuel costs and applicable allowance cost such as Short Term, Economy, and other where the energy is purchased on economic dispatch basis.

Energy receipts that do not involve money payments such as Diversity energy and payback of storage energy are not defined as purchased or interchange power relative to this fuel calculation.

Minus

- (D) The cost of fuel and applicable allowance cost recovered through intersystem sales including the fuel costs and applicable allowance cost related to economy energy sales and other energy sold on an economic dispatch basis.

Energy deliveries that do not involve billing transactions such as Diversity energy and payback of storage are not defined as sales relative to this fuel calculation.

S = Projected system kilowatt-hour sales excluding any intersystem sales.

G = Cumulative difference between jurisdictional fuel revenues billed and fuel expenses at the end of the month preceding the projected period utilized in E and S.

S<sub>1</sub> = Projected jurisdictional kilowatt-hour sales for the period covered by the fuel costs included in E.

The appropriate revenue-related tax factor is to be included in these calculations.

The fuel cost (F) as determined by Public Service Commission of South Carolina is 1.471 cents per kilowatt-hour, which shall remain in effect until superseded by a subsequent Commission order.

Supersedes Rider No. 39T

Effective for bills rendered on and after April 1, 2002

## CAROLINA POWER & LIGHT COMPANY

### HISTORY OF CUMULATIVE RECOVERY ACCOUNT

<u>PERIOD ENDING</u>	<u>OVER (UNDER) \$</u>
March 1979 – Automatic Fuel Adjustment in Effect	
December 1979	1,104,730
September 1980	(12,000,131)
March 1981	( 4,060,364)
August 1981	(12,113,832)
March 1982	( 935,412)
September 1982	( 6,881,796)
March 1983	( 2,259,114)
September 1983	( 3,264,694)
March 1984	109,270
September 1984	2,172,859
March 1985	( 2,317,008)
September 1985	745,913
March 1986	1,972,280
September 1986	( 696,805)
March 1987	2,408,354
September 1987	3,310,059
March 1988	( 3,964,888)
September 1988	( 5,737,541)
March 1989	( 8,125,496)
September 1989	( 5,875,641)
March 1990	( 9,311,149)
September 1990	( 658,614)
March 1991	1,403,023
September 1991	4,661,988
March 1992	5,201,112
September 1992	( 6,712,920)
March 1993	( 9,563,180)
September 1993	0*
March 1994	( 1,010,684)
September 1994	1,975,939
March 1995	7,408,161
September 1995	2,011,489
December 1996	186,139
December 1997	( 6,212,396)
December 1998	(14,334,022)
December 1999	(17,967,157)**
December 2000	(18,627,471)
December 2001	( 9,906,921)
December 2002	( 7,393,266)

\*Eliminated \$14,011,263 per Commission Order No. 93-865

\*\*Reduced by \$6,500,000 per Commission Order No. 1999-324

CAROLINA POWER & LIGHT COMPANY

PROJECTIONS OF THE CUMULATIVE RECOVERY ACCOUNT  
 FOR THE TWELVE MONTH PERIOD ENDING  
 MARCH 2004

	FUEL BASE	PROJECTED CUMULATIVE OVER/(UNDER) RECOVERY (\$)
	1.200	(21,366,826)
	1.300	(14,141,187)
	1.400	(6,915,548)
	1.450	(3,302,729)
	1.470	(1,857,601)
CURRENT FACTOR	1.471	(1,785,344)
	1.472	(1,713,088)
	1.475	(1,496,319)
	1.480	(1,135,037)
	1.485	(773,755)
	1.490	(412,473)
ZERO UNDER	1.495	(51,191)
ZERO OVER	1.496	21,065
	1.497	93,322
	1.500	310,091
	1.525	2,116,501
	1.550	3,922,911
	1.575	5,729,320
	1.600	7,535,730
	1.650	11,148,550
	1.700	14,761,369
	1.800	21,987,008